

Date: Tuesday, 4/4/2006 1:27:14 PM
 User: Kim Johnston

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	BEARPAW CLAMP
Job Number :	26491		
Estimate Number :	10667		
P.O. Number :	N/A	Part Number :	D2870
This Issue :	4/4/2006	S.O. No. :	N/A
Prsht Rev. :	NC	Drawing Number :	D2870 REV A
First Issue :	N/A	Project Number :	N/A
Previous Run :	N/A	Drawing Revision :	A
	Type :	Material :	N/A
	PURCHASED PARTS	Due Date :	4/30/2006
Written By :	<i>See Comment Below</i>		Qty: 100 Um: Each
Checked & Approved By :	<i>06.04.04</i>		
Comment :	Est. B-02.01.17 Added laser cutting. NG/EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: *953*

Laser cut as per Dwg D2870Mat'l AISI 304/316 SS .75 wide x .063 thick.

Material release note required

*06/04/06**100*

2.0	D2870F	Bearpaw Clamp
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 100.0000 Each(s)
 Bearpaw Clamp

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect for Transit Damage

Ensure Material Release Note is attached

*06/04/06**100*

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Inspect Level 6 (5.233 end to end" 4.433 center to center)

06-05-02

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1
 Deburr any rough edges after tumbling

*SAD 06:05:02**100*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 4/4/2006 1:27:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW CLAMP

Job Number: 26491

Part Number: D2870

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form as per Dwg D2870 Use brake to form ends.

Finish form using DT8295

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Tumble

SAO 06:05:03

06:05:04

100

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 5/37

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/05/08

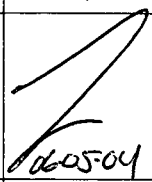
98


Job Completion

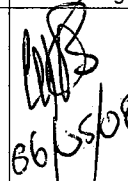
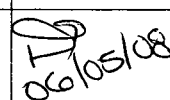
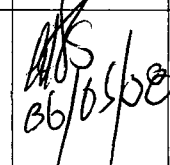
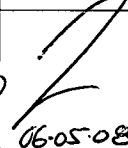


06.05.08

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
06-05-04	8	Tumbling should be done before PCS. Right after forming. Permanent change.					 06-05-04	
06-05-08	8	Scrap 6 pieces						

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 06/05/08
QA: N/C Closed: _____ Date: _____

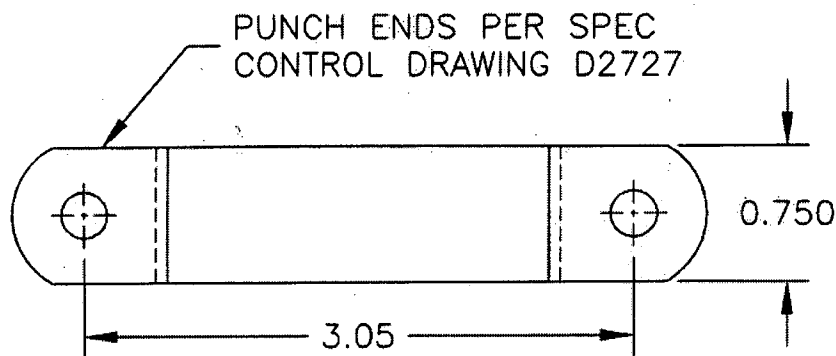
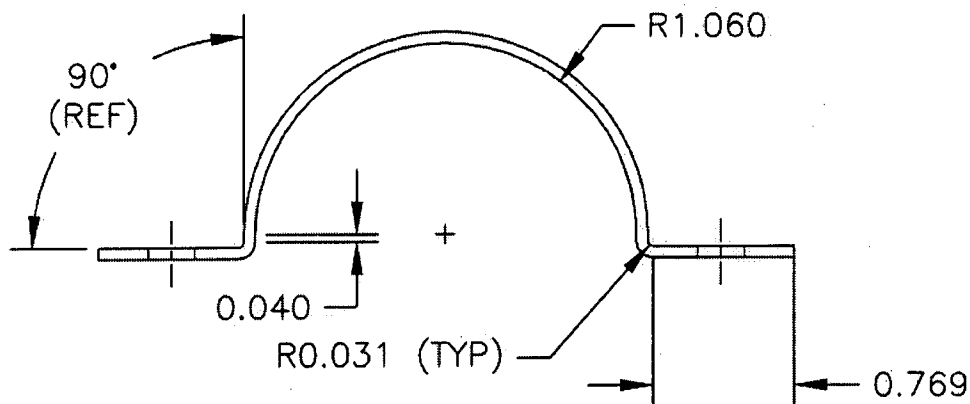
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/05/08	8	Scrap 2 pieces are scrap PARTS Fell Behind machine with other PARTS.	 06/05/08	unable to verify Batch SCRAP. ↑	SAN 06-05-08	 06/05/08	 06/05/08	 06-05-08

NOTE: Date & initial all entries



DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>UP</i>	APPROVED <i>KE</i>	DRAWING NO. D2870	REV. A SHEET 1 OF 1
DATE 99.03.18		TITLE CLAMP	SCALE 1:1
A	99.03.18	NEW ISSUE	

RELEASED
99.04.14 *KE*



FLAT LENGTH: 5.233 END-END
4.433 HOLE-HOLE

SHOP COPY
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ENGINEERING
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

MATERIAL: AISI 304/316 SS 0.75 WIDE x 0.063 THICK
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

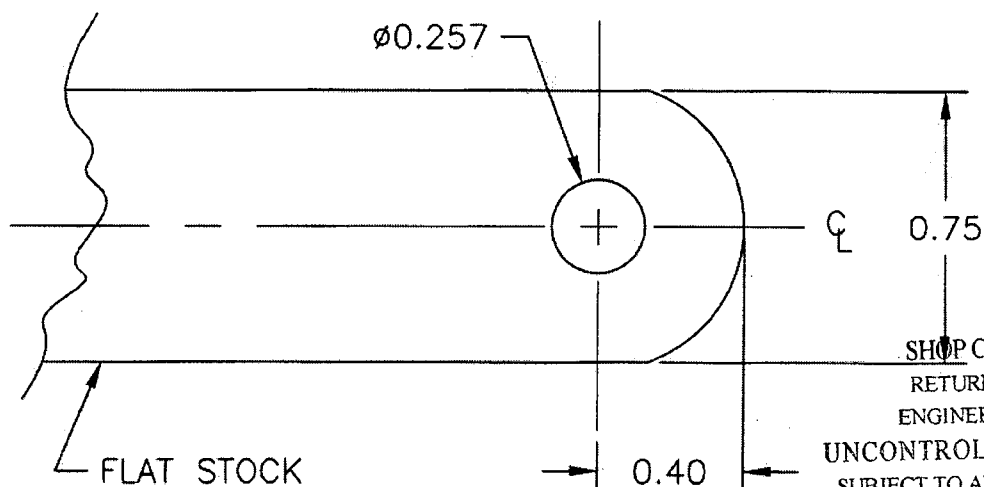
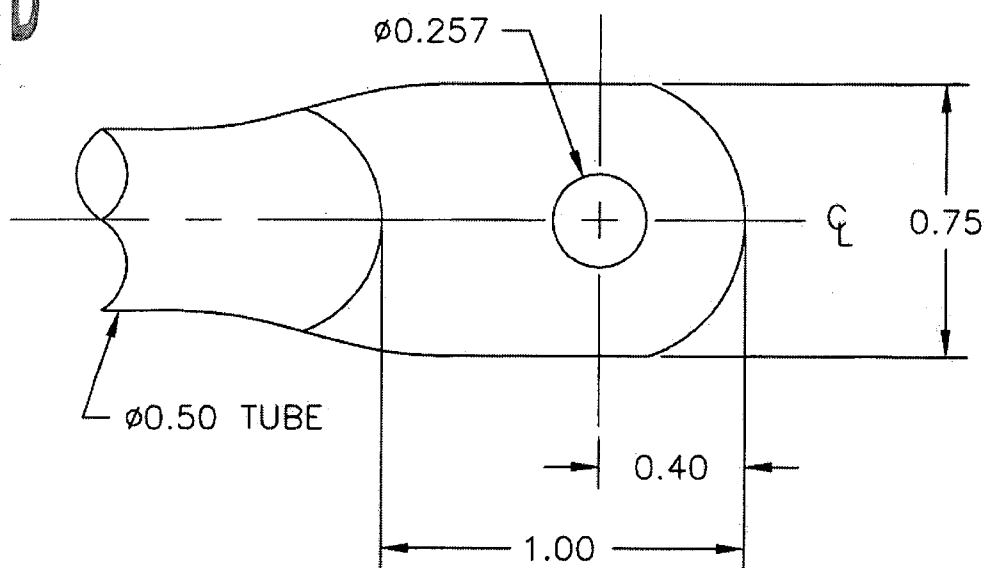
NO. *26491*



DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2727	REV. A SHEET 1 OF 1
DATE 97.11.24		TITLE PUNCH DT8012 SPEC CONTROL	SCALE 2:1
A	97.11.24	NEW ISSUE	
A1	#CP 01.12.20	ADD TOLERANCE NOTE	

SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

RELEASED
98/03/06 KE



NOTE: TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 26491

CERTIFICATE OF COMPLIANCE
CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO. <u>1</u>		OUR JOB NO <u>J0142096</u>		SHIPPING MEMO <u>0335867</u>		
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
<u>100 PCS</u>	<u>P000000953</u>	<u>D2870F</u>	<u>CLAMP</u>	<u>A</u>		
MATERIAL <u>SST 304</u>		SUPPLIED BY <u>SAMUEL SPECIALTY</u>		MAT. REL. NO. <u>0066654 ATT'D</u>		
	PROCESS		PROCESSOR		RELEASE NOTE #	
1						
2						
3						
4						
5						
6						
7						
8						
9						

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 26 APRIL 2006

G.F.I. Q.C. REP. Dutton Harold



SS
06/04/28

LES MÉTAUX SPÉCIALISÉS SAMUEL

Programme d'Assurance Qualité Enregistré / Registered Q.A. Program
ISO 9001:2000 AS9100

LETTRE DE CONFORMITÉ - LETTER OF COMPLIANCE

Date: 1 AOÛT 2005

Company Name: G.F.I. Division of Thomas & Betts limited
Address: 180 avenue Labrosse
City: Pointe Claire, Qué.
Zip Code: H9R 1A1

du client: 0066654
Customer's order #:

de commande SSMQ: 843000
SSMQ's Order #:

La présente est pour certifier que le matériel détaillé ci-dessous est conforme aux exigences de votre commande et des normes du grade tel que décrit:

The following is to certify that the material listed below meets your order requirements and grade standards as described:

Notre/Our Item #	# de pièces/ # of pieces	Épaisseur/Grandeur Gauge/Size	Alliage/Trempe Alloy/Temper	Spécification / Specification	Lot/Heat
1	10	.060" X 48" X 96"	304 2B		7341615

Bien à vous,
Yours truly,



Commis à l'administration.
Administration Clerk.



LES MÉTAUX SPÉCIALISÉS SAMUEL, 21525 CLARK-GRAHAM, BAIE D'URFÉ, QUÉBEC H9X 3T5
SAMUEL SPECIALITY METALS, 21525 CLARK-GRAHAM, BAIE D'URFÉ, QUÉBEC H9X 3T5

TÉL: 514-457-3399
FAX: 514-457-9393

LET. DE. COM 12/01/04

RECEIVED 08/18/2005 11:27 FAX



AK Steel Corporation
Metallurgical Test Report
Rockport Works
Rockport, IN 47635

Page 2

Load No. 7288793
 SRN No. 7288793

CONSUMER

SAMUEL & FILS & CIE LTEE (S)
 FOR DEPT
 2225 FRANCIS HUGHES DRIVE
 LAVAL, CN H7S1N-5

S
H
K
P
Y
O
 SAMUEL & FILS (QUEBEC) LTEE
 2225 FRANCIS HUGHES
 LAVAL, CN H7S1N-5

MILL ORDER NO.
 25292-0523

PROCESSOR ORDER NO.
 C97428-1

BUYERS ORDER NO.
 C97428-1

PART NO.

PARENT COIL ID	POS (F/T)	DIR (L, T, D)	COND	ASTM A 262 PRACTICE E	BEND 180 IT						
0583431-05B	T		A.S.T.M	PASS	OK						

THE CHEMICAL ANALYSIS AND PHYSICAL OR MECHANICAL TESTS REPORTED ABOVE ARE CORRECT
 AS CONTAINED IN THE RECORDS OF THE CORPORATION.

ALL TESTING IS DONE IN ACCORDANCE WITH A.S.T.M. STANDARDS UNLESS OTHERWISE NOTED

AK Steel Corporation

MYC00000 3/99

"THIS CERTIFIED TEST REPORT HAS BEEN DELIVERED TO A CONSIGNEE OF MATERIAL PURCHASED FROM AK
 Steel Corporation. TO AVOID THE POSSIBILITY OF ITS MISUSE ON DELIVERY OF THE REPORT TO A
 THIRD PARTY IT MUST BE RE-CERTIFIED BY AND UNDER THE NAME OF SUCH CONSIGNEE"

SIGNED

[Signature]
 QUALITY MANAGER

DATE 02/17/2005 TIME 08:23 AM

PAGES: 002 R=92%

ID: SAMUEL ET FILS

FAX: AK Steel RightFax

FEU-17-2005 06:45

08/18/2005 THU 11:27 FAX

AB 06/01/28



AK Steel Corporation
Metallurgical Test Report
Rockport Works
Rockport, IN 47635

Page 1

Lead No. 7285793
SRN No. 7288793

CUSTOMER

SAMUEL & FILS & CIE LTEE (S)
PUR DEPT
2225 FRANCIS HUGHES DRIVE
LAVAL, CN H7S1N-5

SHIP TO

SAMUEL & FILS (QUEBEC) LTEE
2225 FRANCIS HUGHES
LAVAL, CN H7S1N-5

MILL ORDER NO.
252502-4523

PROCESSOR ORDER NO.
C9742-1

BUYERS ORDER NO.
C9742E-1

PART NO.

COIL ID	HEAT	PARENT COIL ID	WEIGHT	ENGLISH UNITS - PRODUCT SIZE -	METRIC UNITS
503431-05BA	7341615	0503431-05B	13,140 LBS. 5,960 KG.	.0590 NOM 48.0000 X COIL	
503431-05BB	7341615	0503431-05B	13,050 LBS. 5,919 KG.	.0590 NOM 48.0000 X COIL	
503431-05BC	7341615	0503431-05B	13,130 LBS. 5,956 KG.	.0590 NOM 48.0000 X COIL	

L-Lab Analysis of Heat

P-Product Analysis of Parent Coil

CHEMICAL ANALYSIS

ID	C	MN	P	S	SI	CR	NI	MO	N	CU						
L 7341615	.052	1.385	.032	.0011	.342	18.18	8.10	.35	.0390	.37						

SHIPPING DATE: 02/16/2005

REMARKS: NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS WERE
MADE OR USED THROUGHOUT THE PROCESSING AND TESTING OF THIS MATERIAL.
MATERIAL FREE OF RADIOACTIVE ISOTOPES

PRODUCT DESCRIPTION

CR SHY TYPE 304 STAINLESS #2B FINISH SLIT EDGE TEST REPORTS * ASTM A 240 -04 EX PARA 3.1.9 ELONG WILL BE DETERMINED BY ASTM E 8
* ASTM A 480 -01 EX PARA 19.1.1 ELONG WILL BE DETERMINED BY ASTM E 8 EX PARA 25.1.1.3 COIL WILL BE TAGGED ON OUTSIDE ONLY * ASTM
E SA-240 SECTION II PART A (2001 ED, 2002 ADDENDA) EX PARA 3.1.9 ELONG WILL BE DETERMINED BY ASTM E 8 * ASTM E 240 SECTION II
PART A (2001 ED) EX PARA 19.1.1 ELONG WILL BE DETERMINED BY ASTM E 8 EX PARA 25.1.1.3 COIL WILL BE TAGGED ON OUTSIDE ONLY * ASTM
A 262 -01 PRACTICE E * ASTM A 566 -00 EX 6.1.9 ELONG WILL BE DETERMINED BY ASTM E 8, EX 7.1 TEST SPECIMENS WILL BE SELECTED IN
THE TRANSVERSE TEST DIRECTION IN ALL CASES

PARENT COIL ID	POS (R/T)	DIR (L, T, D)	COND	% ELONG	TENSILE STRENGTH (KSI)	Y.S. 1% OFFSET (KSI)	ROCKWELL HARDNESS Tall	ROCKWELL HARDNESS Front			
0503431-05B	T	T	A&T.M	58.2	94.7	47.1	B 85.3	B 85.8			

*** CONTINUED ON NEXT PAGE ***

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04/05/05

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04/05/05
13/120

PAGES:001 R=92%

ID: SAMUEL ET FILS

FAX: AK Steel RightFax

FEB-17-2005 06:45